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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,521	07/20/2000	Theodor Abels	964-001183	2919

7590

03/28/2002

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EXAMINER

TRAN, DALENA

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 03/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/620,521

Applicant(s)

ABELS ET AL.

Examiner

DALENA TRAN

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 7-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

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## **DETAILED ACTION**

### **Notice to Applicant(s)**

1. This office action is responsive to the amendment filed on 1/14/02. As per request, claims 1,7, and 11 have been amend, and claims 4,6, and 16-20 have been canceled. Thus, claims 1-3,5, and 7-15 are pending.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3,5,7-13, and 14-15, as understood by examiner, are rejected under 35 U.S.C.103(a) as being unpatentable over Avitan (6,050,770) in view of Anderson et al. (6,202,013).

As per claim 1, Avitan discloses an industrial truck, comprising: a plurality of wheels, a load lifting system, and a drive system (see column 5, lines 12-57; and column 6, lines 33-68). Anderson et al. discloses a stabilizing device configured to prevent tipping of the truck and comprising a plurality of wheel load sensors, each load sensor connected to an individual wheel and configured to measure a wheel load (see columns 2-3, lines 39-6; and columns 3-4, lines 32-10); a monitoring device, and load sensors are connected to the monitoring device to control or regulate at least one of the load lifting system and the drive system (see columns 5-7, lines

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40-18); and a speed of rotation sensor connected to the monitoring device (see columns 10-11, lines 42-36); and at least one wheel on the front axle of the truck has a wheel bearing with an integrated wheel load sensor (see column 8, lines 6-68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Avitan by mention load sensors, and load sensors are connected to the monitoring device to control or regulate at least one of the load lifting system and the drive system, and at least one wheel on the front axle of the truck has a wheel bearing with an integrated wheel load sensor for effectively control running attitude of the truck lifting due to lifting height control or tilting angle of an upright.

As per claim 2, Avitan do not mention the monitoring device is connected with actuator units for at least one of inclination of a lifting mast, adjusting the height of a load, adjusting vehicle speed, adjusting vehicle acceleration, adjusting braking intensity, and adjusting steering angle. However, Anderson et al. mention that (see column 4, lines 11-46; and column 9, lines 1-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Avitan by mention the monitoring device is connected with actuator units for at least one of inclination of a lifting mast, adjusting the height of a load, adjusting vehicle maintain the vehicle in a stable state in accordance with the load weight and the load height during lifting or transportation of objects.

As per claims 3 and 12, Anderson et al. mention wheel load sensors are provided on all the wheels of the truck (see the abstract).

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As per claims 5, and 14-15, Avitan discloses the monitoring device includes an evaluation unit configured to determine at least one of transverse tipping forces, longitudinal tipping forces, tipping moments, and load weight (see columns 9-10, lines 28-8).

As per claim 7, Anderson et al. mention speed of rotation sensor is integrated into a wheel bearing (see columns 10-11, lines 42-36).

As per claim 8, Avitan mention measure the speed of the truck (see column 8, lines 18-41).

As per claim 9, Avitan discloses displaying at least one of a load, a load moment, a truck speed, an acceleration, a turning radius, and tipping forces (see columns 8-9, lines 42-48).

As per claim 10, Avitan discloses the industrial truck is a counterbalanced fork lift truck (see columns 2-3, lines 66-13).

As per claim 11, Anderson et al. mention speed of rotation sensor are located on the same axle (see column 10, lines 1-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Avitan by mention speed of rotation sensor are located on the same axle for stabilizing the truck monitoring device.

As per claim 13, Anderson et al. mention at least one wheel on each side of a front axle of the truck has a wheel bearing with an integrated wheel load sensor (see column 8, lines 6-67).

As per claims 5, and 14-15, Avitan mention evaluation unit to determine at least one of transverse tipping force, longitudinal tipping forces, tipping movements, and load weight (see the abstract; and columns 9-10, lines 49-8).

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**Remarks**

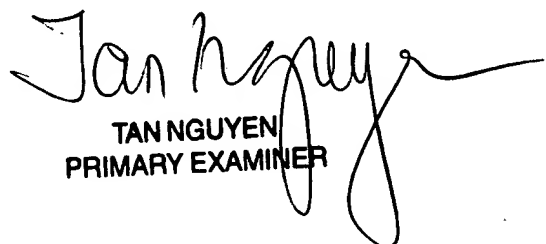
4. Applicant's argument files on 1/14/02 have been fully considered and they are deemed to be persuasive. However, upon updated search and the amended claims, the new ground of rejection has been set forth as above.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is (703)308-8223. The examiner can normally be reached on Monday-Friday from 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski, can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

/dt  
March 21, 2002

  
TAN NGUYEN  
PRIMARY EXAMINER